

August 27, 1999

Analyses Needed to Evaluate CALFED's South Delta Improvement Plan

The CALFED South Delta Plan proposes that, contrary to present practice, water will be taken into Clifton Court during the low tide. It also proposes that there will be no Grantline barrier and that at various times there will (a) be no operating barriers, or (b) an HOR barrier and two tidal barriers, or (c) an HOR barrier and no tidal barriers, or (d) two tidal barriers and no HOR barrier. The plan also includes undefined dredging, and includes adoption of the SJRA proposed method of providing specific quantities of VAMP flows.

For each of these barrier situations there should be an analysis of the following:

- 1) The maximum reduction in channel water depth where there is dredging and where there is no dredging.
- 2) The effect of the plan on water salinity in all portions of South Delta channels.
- 3) The effect of the plan on water quality in CVP exports and in SWP exports.
- 4) The long term effect of the plan on salt drained into the San Joaquin River from the CVP service area with consequent high salinity in the river from the Merced River to Vernalis and consequent burden on New Melones to dilute that salt load.
- 5) The effect of the plan on dissolved oxygen in the San Joaquin River from the bifurcation of Old River to the Central Delta. (To the extent that the projects exacerbate the DO problem they should mitigate it).
- 6) The effect of the plan on DO in internal South Delta channels and on dispersal of waste discharges from Tracy and other communities that discharge into Old River.
- 7) The rigorous scientific basis for omitting a Grantline Barrier at different times of the year and different real time situations.
- 8) The effect of the SJRA proposal on summer flow in the San Joaquin River and the consequent effect on steelhead trout and on salmon smolts that migrate before and after the SJRA's pulsed flow period.

9) The public safety and erosion and flood risks associated with installation, operation, and removal of the HOR barrier at the Vernalis flows proposed by SJRA.

In examining these concerns they should also be addressed under the alternative that the CVP intake may be moved into Clifton Court.

The Plan should then be compared in respect to all concerns to an alternative in which three operable tidal barriers and an operable HOR barrier are provided and operated in a coordinated manner at any point in time to maximize fish protection while mitigating the impacts of the CVP and SWP on the inchannel water supply. When fishery protection necessitates curtailment of exports, the need for barrier operation to mitigate exports can also be curtailed. This alternative should also provide most of the pulsed Vernalis flow by recirculation of DMC water and should limit HOR installation to safe river levels. The difference in overall fishery benefit and in impact on inchannel water supplies should be assessed between this plan and CALFED's plan with rigorous scientific analysis and with field testing if needed,

Alex Hildebrand
23443 S. Hays Rd.
Maritaca, CA 95337-8882



Stein Buer
CALFED Bay-Delta Program
1416 Ninth Street, Suite 1155
Sacramento, CA 95814